

## DMS - 8102

### PAINT SYSTEMS FOR GALVANIZED STEEL

EFFECTIVE DATES: APRIL 2014–JUNE 2015.

**8102.1. Description.** This Specification governs and defines durable paint systems for use on galvanized steel.

**8102.2. Units of Measurements.** The values given in parentheses (if provided) are not standard and may not be exact mathematical conversions. Use each system of units separately. Combining values from the two systems may result in nonconformance with the standard.

**8102.3. Material Producer List.** The Materials and Pavements Section of the Construction Division (CST/M&P) maintains the Material Producer List (MPL) of all materials conforming to the requirements of this Specification. Materials appearing on the MPL, entitled "[Paint Systems for Galvanized Steel](#)" require sampling and testing for product verification before use.

**8102.4. Bidders' and Suppliers' Requirements.** The Department will only purchase or allow on projects those products listed by manufacturer and product code or designation shown on the MPL.

**8102.5. MPL Qualification Procedure.**

**A. Qualification Request.** Submit a request for evaluation under DMS-8102 to the Texas Department of Transportation, CST/M&P (CP-51), 9500 North Lake Creek Parkway, Austin, TX 78717.

Include the following with the request:

- full test report from an independent lab showing results passing the performance requirements of American Architectural Manufacturers Association (AAMA) 2605, Section 7;
- MSDS that complies with OSHA Hazard Communication Standard 29 CFR 1910.1200;
- product data sheet;
- application data sheet; and
- a 1 qt. sample (approximate) of each material component (base and cure).

**B. Evaluation.** The Department will evaluate one sample each of liquid and powder at no cost to the producer. The producer will bear the cost associated with additional testing necessary to establish quality. The Director of CST/M&P will assess this cost at the time of evaluation.

**1. Qualification.** The Department will list materials meeting the requirements of this Specification on the MPL.

- 2. Failure.** Producers not qualified under this Specification may not furnish materials for Department projects.

Producers failing to qualify may submit a request for re-evaluation after 6 months has elapsed from the date of the original request. CST/M&P may modify this time limit at its discretion. In the request for re-evaluation, the producer must document the cause of the issue and corrective action taken.

The Department normally bears the costs of sampling and testing; however, the producer will bear the costs associated with materials failing to conform to the requirements of this Specification. The Director of CST/M&P will assess this cost at the time of re-evaluation.

- C. Formulation Changes.** Report any changes in formulation to CST/M&P. The Department will evaluate one reformulation each of liquid and powder per year at no cost to the producer. The Department reserves the right to conduct any tests deemed necessary to identify a qualified material and to determine if there has been a change in formulation. Detected changes not reported to the Department may be grounds for removal from the MPL.

Except for transition periods not to exceed 3 mo., a supplier may not supply more than one formula per type of coating (liquid or powder) at the same time.

- D. Periodic Evaluation.** The Department reserves the right to perform random audits of test reports and to conduct random sampling and testing to evaluate the performance of materials. In case of variance, the Department's tests will govern. CST/M&P will select random samples from materials submitted to the Department on contracts or direct State purchase orders. Failure to comply with the requirements of this Specification may be cause for removal from the MPL.

- E. Disqualification.** Causes for disqualification may include, but are not limited to:

- falsification of documentation,
- failure to report formulation changes,
- failure to meet the requirements of this Specification as a result of periodic evaluation, or
- producer has unpaid charges for failing samples.

CST/M&P will remove disqualified producers from the MPL and will not allow submission of material for re-qualification for 6 mo., at the discretion of the Department.

- F. Re-Qualification.** Once the disqualification period established by CST/M&P has elapsed, producers disqualified and removed from the MPL may begin the re-qualification process by submitting a request in accordance with Section 8102.5.A, including additional documentation identifying the cause of the problem and corrective action taken. The re-qualification process will then follow all subsequent Sections of Article 8102.5.

The Department normally bears the costs of sampling, testing, and inspection; however, the disqualified producer will bear the costs associated with re-qualification. The Director of CST/M&P will assess this cost at the time of re-evaluation.

**8102.6. Material Requirements.**

- A. Consistency.** The applied coating must form a firm, continuous, uniform film free of pinholes, bubbles, cracks, peeling, flaking, or other film defects, and must exhibit satisfactory adhesion (rating 8 or higher) when evaluated in accordance with ASTM D 6677.
- B. Color.** The color must match the color standard supplied in the plans or by the Engineer within a Delta E of 2.0 utilizing a D65 illuminant and 10 degree observer.
- C. Infrared Spectrum.** The infrared spectrum taken in accordance with Tex-888-B must match the pre-qualification sample. For multicomponent systems, this applies to each component.
- D. Percent Solids.** The percent solids of liquid coatings must be within 2.0% of the pre-qualification sample when tested in accordance with ASTM D 2369. The Department may make allowances for different colors/tints.
- E. Density.** The density of each component must not vary by more than 0.15 lb. per gallon from the density of the pre-qualification sample. Density of liquid samples will be evaluated in accordance with ASTM D 1475. Powder samples will be evaluated by gas pycnometer.

**8102.7. Containers and Marking.**

- A. Packaging.** Ship materials in suitable strong, well-sealed containers that meet federal requirements and are sufficiently sturdy to withstand normal shipping and handling.
- B. Labeling.** Label the sides of the containers and cases with a durable label legibly printed with the following:
- manufacturer name;
  - product designation, including component part (if applicable);
  - batch number;
  - date of manufacture; and
  - net volume or weight.

If palletized or if other group packaging is used, maintain a label that is easily readable on the outside packaging.